



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2011-1328; Directorate Identifier 2011-CE-037-AD; Amendment 39-16880; AD 2011-25-04]**

**RIN 2120-AA64**

**Airworthiness Directives; Quest Aircraft Design, LLC Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule; request for comments.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain Quest Aircraft Design, LLC (Quest) Model Kodiak 100 airplanes. This AD requires you to inspect the torque of the inertial particle separator (IPS) bolts; correct the torque, if necessary; replace the IPS bolts with new IPS bolts within a certain time; and install safety wire around the new IPS bolts. This AD was prompted by five instances where a loose IPS bolt was found on the right-hand side of the engine bypass door attachment. This condition, if not corrected, could lead to an inoperable bypass door, which could result in engine inlet icing with consequent loss of engine power and forced landing. We are issuing this AD to correct the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this AD, contact Quest Aircraft Design, LLC, 1200 Turbine Drive, Sandpoint, Idaho 83864; phone: 208-263-1111; fax: 208-263-1511; email: <http://questaircraft.com/quest/contact-quest/customer-service/>; Internet: <http://questaircraft.com/>. You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call 816-329-4148.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Tung Tran, Aerospace Engineer, Seattle Aircraft Certification Office, FAA, 1601 Lind Avenue, SW, Renton, Washington 98057; phone: (425) 917-6505; fax: (425) 917-6590; e-mail: [tung.tran@faa.gov](mailto:tung.tran@faa.gov).

**SUPPLEMENTARY INFORMATION:**

**Discussion**

We received reports of five instances where a loose IPS bolt was found on the right-hand side of the engine bypass door attachment on Quest Model Kodiak 100 airplanes. This area attaches the bypass door to the actuating shaft. In one of the five instances, the bolt was lost. Loose or missing IPS bolts could lead to an inoperable bypass door, which could result in engine inlet icing with consequent loss of engine power and forced landing.

**Relevant Service Information**

We reviewed Quest Aircraft Company Mandatory Service Bulletin Number SB11-17, Revision: 00, dated November 1, 2011; and Quest Aircraft Company Field Service Instruction No. FSI-028, Revision 02, (undated). The service information describes procedures for inspecting and re-torquing the first IPS bolt, replacing both IPS bolts with new bolts, and installing safety wire around the new bolts.

**FAA's Determination**

We are issuing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

**AD Requirements**

This AD requires accomplishing the actions specified in the service information described previously.

### **FAA's Justification and Determination of the Effective Date**

An unsafe condition exists that requires the immediate adoption of this AD. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because this condition, if not corrected, could result in loss of engine power that may lead to a forced landing. Therefore, we find that notice and opportunity for prior public comment are impracticable and that good cause exists for making this amendment effective in less than 30 days.

### **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment. However, we invite you to send any written data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include the docket number FAA-2011-1328 and Directorate Identifier 2011-CE-037-AD at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this AD.

### **Costs of Compliance**

We estimate that this AD affects 38 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

### Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspect and re-torque the AN4-4A bolt	0.5 work-hour X \$85 per hour = \$42.50	Not Applicable	\$42.50	\$1,615
Replace the IPS bolts, part numbers (P/N) AN4-4A and AN4-5A, with new IPS bolts, P/N AN4H4A and AN4H5A, respectively. Install safety wire around the new bolts.	1 work-hour X \$85 per hour = \$85	\$86	\$171	\$6,498

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

#### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. “Subtitle VII: Aviation Programs” describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds

necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

### **§ 39.13 [Amended]**

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2011-25-04 **Quest Aircraft Design, LLC**: Amendment 39-16880; Docket No.

FAA-2011-1328; Directorate Identifier 2011-CE-037-AD.

**(a) Effective Date**

This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Quest Aircraft Design, LLC Model Kodiak 100 airplanes, serial numbers 100-0001 through 100-0056, certificated in any category.

**(d) Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 7160, Engine Air Intake System.

**(e) Unsafe Condition**

This AD was prompted by reports of five instances where a loose IPS bolt was found on the right-hand side of the engine bypass door attachment. This condition, if not corrected, could lead to an inoperable bypass door, which could result in engine inlet icing with consequent loss of engine power and forced landing. We are issuing this AD to correct the unsafe condition on these products.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Torque of the IPS AN4-4A Bolt**

Before further flight on or after [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), inspect the torque of the IPS bolt, part number (P/N) AN4-4A, and re-torque, if necessary, following Quest Aircraft Company Field Service Instruction No. FSI-028, Revision 02,

(undated) as specified in Mandatory Service Bulletin No. SB11-17, Revision: 00, dated November 1, 2011.

**(h) Replace the IPS AN4-4A and AN4-5A Bolts**

Within 15 hours time-in-service (TIS) after [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), replace the IPS bolts, P/N AN4-4A and P/N AN4-5A, with new IPS bolts, P/N AN4H4A and P/N AN4H5A, respectively. After installing the new bolts, install safety wire around the new bolts. Do the actions following Quest Aircraft Company Field Service Instruction No. FSI-028, Revision 02, (undated) as specified in Mandatory Service Bulletin No. SB11-17, Revision: 00, dated November 1, 2011.

**(i) Prohibition of Installation of IPS AN4-4A and AN4-5A Bolts**

As of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), do not install any IPS bolts, P/N AN4-4A or P/N AN4-5A.

**(j) Special Flight Permit**

Special flight permits are permitted with the following limitation: flight into known icing is prohibited.

**(k) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD.



(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(l) Related Information**

For more information about this AD, contact Tung Tran, Aerospace Engineer, Seattle ACO, FAA, 1601 Lind Avenue, SW, Renton, Washington 98057; phone: (425) 917-6505; fax: (425) 917-6590; e-mail: [tung.tran@faa.gov](mailto:tung.tran@faa.gov).

**(m) Material Incorporated by Reference**

(1) You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference (IBR) under 5 U.S.C. 552(a) and 1 CFR part 51 on [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(i) Quest Aircraft Company Mandatory Service Bulletin No. SB11-17, Revision: 00, dated November 1, 2011; and

(ii) Quest Aircraft Company Field Service Instruction No. FSI-028, Revision 02, (undated).

(2) For service information identified in this AD, contact Quest Aircraft Design, LLC, 1200 Turbine Drive, Sandpoint, Idaho 83864; phone: 208-263-1111; fax: 208-263-1511; email: <http://questaircraft.com/quest/contact-quest/customer-service/>; Internet: <http://questaircraft.com/>.

(3) You may review copies of the service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call 816-329-4148.

(4) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information

on the availability of this material at an NARA facility, call 202-741-6030, or go to  
[http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).  
Issued in Kansas City, Missouri, on November 25, 2011.

John Colomy,  
Acting Manager, Small Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2011-30881 Filed 12/01/2011 at 8:45 am; Publication Date: 12/02/2011]